AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1   1.   (Currently Amended) A method executed by a computer of determining a desired

2   product corresponding to a user objective, comprising the steps of:

3   (a) providing a first said user objective;

4   (b) providing a first set of input data selected from one or both of wellbore data and

5   reservoir data;

6   (c) automatically generating a first workflow in response to the first user objective;

7   (d) automatically selecting a first subset of one or more software modules of a first tool

8   and a second subset of software modules of a second tool in response to the first workflow;

9   (e) executing said one or more software modules of the first subset on [[in]] a processor

10   in response to said first set of input data; and

11   executing one or more software modules of the second subset on said processor in

12   response to output from the one or more software modules of the first subset; and

13   (f) determining a first said desired product in response to [[the]] at least executing the

14   software modules of the first and second subsets, wherein the first said desired product includes

15   a model of a reservoir to be produced by a well step (e).

1   2.   (Currently Amended) The method of claim 1, further comprising:

2   ~~(g)~~ providing a second said user objective;

3   ~~(h)~~ providing a second set of input data;

4   ~~(i)~~ automatically generating a second workflow in response to the second user objective;

5   ~~(j)~~ automatically selecting <u>a third subset of</u> ~~one or more additional~~ software modules <u>of</u>

6   <u>the first tool and a fourth subset of software modules of the second tool</u> in response to said

7   second workflow<u>, wherein the third subset is different from the first subset, and the fourth</u>

8   <u>subset is different from the second subset</u>;

9   ~~(k)~~ executing ~~said~~ one or more ~~additional~~ software modules <u>in the third subset on</u> said

10   processor in response to said second set of input data; ~~and~~

11   <u>executing one or more software modules in the fourth subset on said processor in</u>

12   <u>response to output from the one or more software modules of the third subset; and</u>

13   ~~(l)~~ determining a second said desired product in response to the executing <u>the software</u>

14   <u>modules of the third and fourth subsets</u> ~~step (k)~~.

1   3.   (Currently Amended) A <u>computer-readable medium</u> ~~program storage device~~ readable

2   by a <u>computer</u> ~~machine~~ tangibly embodying a set of instructions executable by said <u>computer</u>

3   ~~machine~~ to perform method steps for determining a desired product corresponding to a user

4   objective, said method steps comprising:

5   ~~(a)~~ receiving a first said user objective;

6   ~~(b)~~ receiving a first set of input data <u>selected from one or both of wellbore data and</u>

7   <u>reservoir data</u>;

8   ~~(c)~~ automatically generating a first workflow in response to the first user objective;

9   ~~(d)~~ automatically selecting <u>a first subset of</u> ~~one or more~~ software modules <u>of a first tool</u>

10   <u>and a second subset of software modules of a second tool</u> in response to the first workflow;

11   ~~(e)~~ executing ~~said~~ one or more software modules in <u>the first subset on</u> a processor in

12   response to said first set of input data; ~~and~~

13   <u>executing one or more software modules of the second subset on said processor in</u>

14   <u>response to output from the one or more software modules of the first subset; and</u>

15   ~~(f)~~ determining a first said desired product in response to ~~the~~ <u>at least</u> executing <u>the</u>

16   <u>software modules of the first and second subsets, wherein the first said desired product includes</u>

17   <u>a model of a reservoir to be produced by a well</u> ~~step (e)~~.

1   4.   (Currently Amended) The <u>computer-readable medium</u> ~~program storage device~~ of claim

2   3, said method steps further comprising:

3   ~~(g)~~ receiving a second said user objective;

4   ~~(h)~~ receiving a second set of input data;

5   ~~(i)~~ automatically generating a second workflow in response to the second user objective;

6   ~~(j)~~ automatically selecting <u>a third subset of</u> ~~one or more additional~~ software modules <u>of</u>

7   <u>the first tool and a fourth subset of software modules of the second tool</u> in response to said

8   second workflow<u>, wherein the third subset is different from the first subset, and the fourth</u>

9   <u>subset is different from the second subset</u>;

10   ~~(k)~~ executing ~~said~~ one or more ~~additional~~ software modules in <u>the third subset on</u> said

11   processor in response to said second set of input data; ~~and~~

12   <u>executing one or more software modules in the fourth subset on said processor in</u>

13   <u>response to output from the one or more software modules of the third subset; and</u>

14   ~~(l)~~ determining a second said desired product in response to the executing <u>the software</u>

15   <u>modules of the third and fourth subsets</u> ~~step (k)~~.

1   5.   (Currently Amended) A system responsive to a set of input data and a user objective

2   ~~adapted~~ for generating a desired product corresponding to said user objective, comprising:

3   first apparatus ~~adapted~~ for receiving a first said user objective and a first set of input

4   data <u>selected from one or both of wellbore data and reservoir data</u>;

5   second apparatus ~~adapted~~ for automatically generating a first workflow in response to

6   the first user objective;

7   third apparatus ~~adapted~~ for automatically selecting <u>a first subset of</u> ~~one or more~~

8   software modules <u>of a first tool and a second subset of software modules of a second tool</u> in

9   response to the first workflow; and

10   processor apparatus ~~adapted~~ for automatically executing ~~said~~ one or more software

11   modules <u>of the first subset</u> in response to said first set of input data<u>, executing one or more</u>

12   <u>software modules of the second subset in response to output from the one or more software</u>

13   <u>modules of the first subset,</u> and generating a first said desired product in response to <u>at least</u> ~~the~~

14   execution of ~~said one or more~~ <u>the</u> software modules <u>of the first and second subsets, wherein the</u>

15   <u>first said desired product includes a model of a reservoir to be produced by a well</u>.

1   6.   (Currently Amended) The system of claim 5, wherein:

2   said first apparatus receives a second said user objective and a second set of input data;

3   said second apparatus automatically generates a second workflow in response to the

4 second user objective;

5   said third apparatus automatically selects <u>a third subset of</u> ~~one or more additional~~

6 software modules <u>of the first tool and a fourth subset of software modules of the second tool</u> in

7 response to said second workflow<u>, wherein the third subset is different from the first subset,</u>

8 <u>and the fourth subset is different from the second subset</u>; and

9   said processor apparatus automatically executes ~~said~~ one or more ~~additional~~ software

10 modules <u>in the third subset</u> in response to said second set of input data<u>, executes one or more</u>

11 <u>software modules in the fourth subset in response to output from the one or more software</u>

12 <u>modules of the third subset,</u> and generates a second said desired product in response to the

13 execution of <u>the</u> ~~said one or more additional~~ software modules <u>of the third and fourth subsets</u>.

1   7.   (Currently Amended) A method <u>executed by a computer</u> for determining a final product

2 in response to a user objective, comprising the steps of:

3   ~~(a)~~ providing said user objective and providing input data <u>selected from one or both of</u>

4 <u>wellbore data and reservoir data</u>;

5   ~~(b)~~ generating a specific workflow corresponding to said user objective;

6   ~~(c)~~ selecting a plurality of software modules in response to said specific workflow, said

7 plurality of software modules <u>including a first subset of software modules</u> having a <u>first</u>

8 predetermined sequence<u>, and a second subset of software modules having a second</u>

9 <u>predetermined sequence</u>;

10   ~~(d)~~ executing said ~~plurality of~~ software modules <u>of the first subset</u> in said <u>first</u>

11 predetermined sequence in response to said input data; ~~and~~

12   <u>executing said software modules of the second subset in said second predetermined</u>

13 <u>sequence in response to output of the first subset of software modules; and</u>

14   ~~(e)~~ generating said final product when the execution of said plurality of software

15 modules ~~in said predetermined sequence~~ is complete<u>, wherein said final product includes a</u>

16 <u>model of a reservoir to be produced by a well</u>.

8.   (Cancelled)

1 9.   (Currently Amended) The method of claim 7 [[8]], wherein ~~the executing step (d)~~

2 ~~comprises the steps of:~~ executing said first subset ~~plurality~~ of software modules in said first

3 predetermined sequence in response to said input data ~~thereby generating~~ generates conditioned

4 data; and executing said second subset ~~plurality~~ of software modules in said second

5 predetermined sequence is in response to said conditioned data, said final product being

6 generated when the execution of said second subset ~~plurality~~ of software modules in said

7 second predetermined sequence is complete.

1 10.   (Currently Amended) A computer-readable medium ~~program storage device~~ readable

2 by a computer ~~machine~~ tangibly embodying a set of instructions executable by the computer

3 ~~machine~~ to perform method steps for determining a final product in response to a user

4 objective, said method steps comprising:

5   ~~(a)~~ providing said user objective and providing input data selected from one or both of

6 wellbore data and reservoir data;

7   ~~(b)~~ generating a specific workflow corresponding to said user objective;

8   ~~(c)~~ selecting a plurality of software modules in response to said specific workflow, said

9 plurality of software modules including a first subset of software modules having a first

10 predetermined sequence, and a second subset of software modules having a second

11 predetermined sequence;

12   ~~(d)~~ executing said ~~plurality of~~ software modules of the first subset in said first

13 predetermined sequence in response to said input data; ~~and~~

14   executing said software modules of the second subset in said second predetermined

15 sequence in response to output of the first subset of software modules; and

16   ~~(e)~~ generating said final product when the execution of said plurality of software

17 modules ~~in said predetermined sequence~~ is complete, wherein said final product includes a

18 model of a reservoir to be produced by a well.

11.   (Cancelled)

1   12.   (Currently Amended) The <u>computer-readable medium</u> ~~program storage device~~ of claim

2   <u>10</u> [[11]], wherein ~~the executing step (d) comprises the steps of:~~ executing said first <u>subset</u>

3   ~~plurality~~ of software modules in said first predetermined sequence in response to said input data

4   ~~thereby generating~~ <u>generates</u> conditioned data; and executing said second <u>subset</u> ~~plurality~~ of

5   software modules in said second predetermined sequence <u>is</u> in response to said conditioned

6   data, said final product being generated when the execution of said second <u>subset</u> ~~plurality~~ of

7   software modules in said second predetermined sequence is complete.

1   13.   (Currently Amended) A system ~~adapted~~ for determining a final product in response to a

2   user objective, comprising:

3   first apparatus ~~adapted~~ for receiving said user objective and receiving input data

4   <u>selected from one or both of wellbore data and reservoir data</u>;

5   second apparatus ~~adapted~~ for generating a specific workflow corresponding to said user

6   objective;

7   third apparatus ~~adapted~~ for selecting a plurality of software modules in response to said

8   specific workflow, said plurality of software modules <u>including a first subset of software</u>

9   <u>modules</u> having a <u>first</u> predetermined sequence<u>, and a second subset of software modules</u>

10   <u>having a second predetermined sequence</u>;

11   fourth apparatus ~~adapted~~ for executing said ~~plurality of~~ software modules <u>of the first</u>

12   <u>subset</u> in said <u>first</u> predetermined sequence in response to said input data[[;]] and <u>executing said</u>

13   <u>software modules of the second subset in said second predetermined sequence in response to</u>

14   <u>output of the first subset of software modules; and</u>

15   fifth apparatus ~~adapted~~ for generating said final product when the execution of said

16   plurality of software modules ~~in said predetermined sequence~~ is complete<u>, wherein said final</u>

17   <u>product includes a model of a reservoir to be produced by a well</u>.

14.   (Cancelled)

1   15.   (Currently Amended) The system of claim <u>13</u> [[14]], wherein the fourth apparatus

2   ~~adapted for executing said plurality of software modules in said predetermined sequence in~~

3   ~~response to said input data comprises:~~

4   ~~apparatus adapted~~ for executing said first <u>subset</u> ~~plurality~~ of software modules in said

5   first predetermined sequence in response to said input data ~~thereby generating~~ <u>generates</u>

6   conditioned data; and <u>the fourth</u> apparatus ~~adapted~~ for executing said second <u>subset</u> ~~plurality~~ of

7   software modules in said second predetermined sequence <u>is</u> in response to said conditioned

8   data, said final product being generated when the execution of said second <u>subset</u> ~~plurality~~ of

9   software modules in said second predetermined sequence is complete.

1   16.   (New) The method of claim 1, wherein executing the one or more software modules of

2   the first subset causes conditioning of the input data to provide the output that includes

3   conditioned input data.

1   17.   (New) The method of claim 16, wherein conditioning the input data includes

2   interpreting the input data.

1   18.   (New) The method of claim 1, further comprising using the reservoir model to predict

2   performance of producing from the reservoir.

1   19.   (New) The computer-readable medium of claim 3, wherein executing the one or more

2   software modules of the first subset causes conditioning of the input data to provide the output

3   that includes conditioned input data.

1   20.   (New) The computer-readable medium of claim 19, wherein conditioning the input data

2   includes interpreting the input data.

1   21.   (New) The computer-readable medium of claim 3, further comprising using the

2   reservoir model to predict performance of producing from the reservoir.

1   22.   (New) The system of claim 5, wherein executing the one or more software modules of

2   the first subset causes conditioning of the input data to provide the output that includes

3   conditioned input data.

1   23.   (New) The system of claim 22, wherein conditioning the input data includes

2   interpreting the input data.

1   24.   (New) The system of claim 5, wherein the processor apparatus is to further use the

2   reservoir model to predict performance of producing from the reservoir.

1   25.   (New) The method of claim 7, wherein executing the first subset of software modules

2   causes conditioning of the input data to provide the output that includes conditioned input data.

1   26.   (New) The method of claim 25, wherein conditioning the input data includes

2   interpreting the input data.

1   27.   (New) The method of claim 7, further comprising using the reservoir model to predict

2   performance of producing from the reservoir.

1   28.   (New) The computer-readable medium of claim 10, wherein executing the first subset

2   of software modules causes conditioning of the input data to provide the output that includes

3   conditioned input data.

1   29.   (New) The computer-readable medium of claim 28, wherein conditioning the input data

2   includes interpreting the input data.

1   30.   (New) The computer-readable medium of claim 10, wherein the method steps further

2   comprise using the reservoir model to predict performance of producing from the reservoir.

1   31.   (New) The system of claim 13, wherein executing the first subset of software modules

2   causes conditioning of the input data to provide the output that includes conditioned input data.

1   32.   (New) The system of claim 31, wherein conditioning the input data includes

2   interpreting the input data.

1   33.   (New) The system of claim 13, further comprising a sixth apparatus to use the reservoir

2   model to predict performance of producing from the reservoir.